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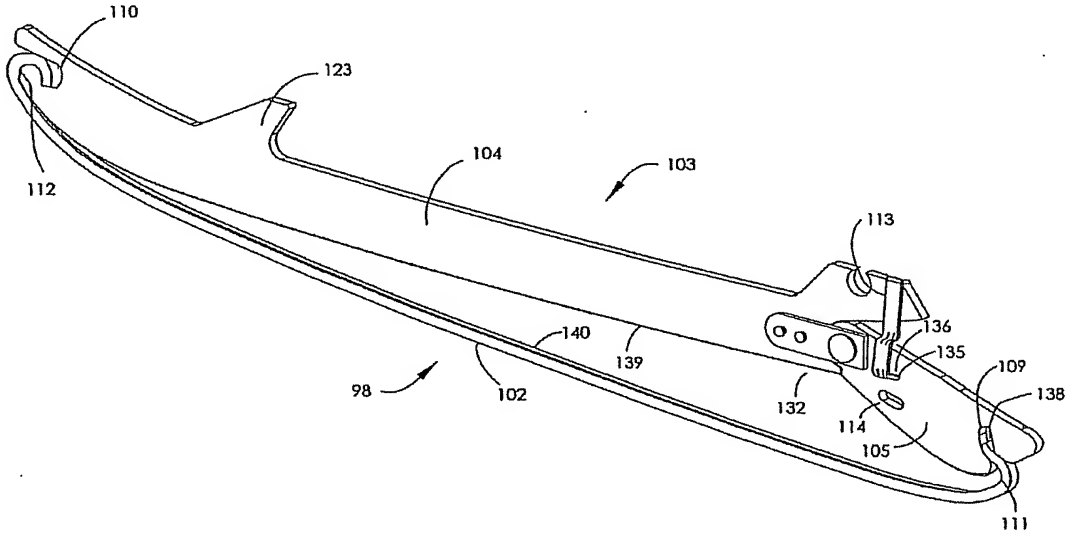
(54) Title: SKATE STRIP-BLADE HOLDER



(57) Abstract: An ice skate strip-blade holder that provides a means to remove, replace, tension, and maintain tension in a strip-blade fastened and tensioned on the holder. In a preferred embodiment, the strip-blade holder assembly includes a front segment fixed to the skate plastic superstructure; a latched, pivoting rear segment arranged to apply and maintain tension in the strip-blade. In a preferred embodiment, the pivot and latch are positioned such that the pivot carries the majority of the tensile load maintained in the strip-blade and the latch carries a minor component of this tensile load. This arrangement provides for easy latch release. The latch provides release of the rear segment for subsequent pivoting and unhooking of the strip-blade for replacement.

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SKATE STRIP-BLADE HOLDER

This application claims the benefit of U.S. Provisional Patent Application Nos. 60/519,435 filed November 12, 2003, 60/588,823 filed July 16, 2004, and 60/604,664, filed August 26, 2004.

Background:

It is usually desired to minimize the mass of any footwear and this is especially true for footwear used in competitive sports such as ice hockey and figure skating. The mass of a steel blade conventionally used for ice skates is significant and comprises a large component of the mass of the overall skate assembly. Strip-blade technology has been used for many years, an example of such a blade technology is described in U.S. Patent Nos. 2,150,964 and 3,947,050 which are incorporated by reference herein in their entireties, and whereby the strip-blade is hooked or otherwise connected at each end and tensioned over the rocker of the strip-blade holder. As described by these patents, tension in the strip-blade is required to meet the desired requirements of skating.

Prior art strip-blade technologies utilized relatively massive and complex blade tensioning mechanisms. As a result, this technology does not offer a significant weight reduction. The pre-sharpened strip-blades are typically sold in pairs at retail stores and vending machines to be mounted by consumers on skates equipped with the special mounting fixture and blade-tensioning device. The technology has gained limited popularity based upon other benefits, as follows. The strip-blades are made available to consumers at a price approximately the same as it costs to sharpen conventional skates that utilize conventional single piece steel blades. As such, the strips are typically disposed after they become dull from use. The consumer then replaces the dulled strip-blades with newly purchased pre-sharpened strip-blades. It is thus more convenient for the consumer to use the strip-blades then to have his or her skates re-sharpened. Furthermore, the pre-sharpened strip-blades are typically sharpened on accurate and repeatable factory machines that provide much higher reliability in sharpening quality then the sharpening typically done at ice rinks, arenas, and sporting goods shops - usually by unskilled operators utilizing poor equipment.